

Experience of Care: Patient Safety and Clinical Quality

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Why Quality Improvement Remains a Challenge

"The fundamental problem with the quality of American medicine is that we've failed to view delivery of health care as a science. ... That's a mistake, a huge mistake."

Peter Pronovost, M.D., PhD, Johns Hopkins Hospital









Research that Focuses on Patient Outcomes

Patient-Centeredness: The Final Frontier?

- Patient-centeredness may be the most challenging of all six domains of quality, because it is so difficult to define and measure
- But, it is also likely the most important, because it includes elements of all other domains





A Quality Agenda for System Transformation

- Recent legislation addresses:
 - Access
 - Affordability
 - Information technology
 - Performance measurement, reporting, and improvement
 - Evidence and information
 - Equity
 - Value
- Together, these components comprise a quality agenda



Experience of Care: Patient Safety and Clinical Quality



- Building A Culture of Safety
- Improving Quality Through Patient-Centered Outcomes Research
- 21st Century Health Care: A Patient-Centered Health System
- Questions



AHRQ Priorities

Ambulatory Patient Safety

- Safety & Quality Measures, **Drug Management and Patient-Centered Care**
- Patient Safety Improvement Corps

Medical Expenditure Panel Surveys

- Medical Expenditures
- Annual Quality & Disparities Reports

Patient Safety

- Health IT
- Patient Safety **Organizations**
- New Patient **Safety Grants**

Effective Health **Care Program**

- Comparative Effectiveness Reviews
- Comparative Effectiveness Research
- Clear Findings for Multiple Audiences

Other Research & **Dissemination Activities**

- Visit-Level Information on Quality & Cost-Effectiveness, e.g. Prevention and Pharmaceutical Outcomes
 - U.S. Preventive Services Task Force
 - MRSA/HAIs

Military Health System Conference



January 24 - 27, 2011

Gaylord National Resort & Convention Center National Harbor, MD

The Quadruple Aim: The MHS Value Model

Readiness

Ensuring that the total military force is medically ready to deploy and that the medical force is ready to deliver health care anytime, anywhere in support of the full range of military operations, including humanitarian missions.

Experience of Care

Providing a care experience that is patient and family centered, compassionate, convenient, equitable, safe and always of the highest quality.



Population Health

Reducing the generators of ill health by encouraging healthy behaviors and decreasing the likelihood of illness through focused prevention and the development of increased resilience.

Per Capita Cost

Creating value by focusing on quality, eliminating waste, and reducing unwarranted variation; considering the total cost of care over time, not just the cost of an individual health care activity.



The Quadruple Aim and AHRQ

AHRQ's mission and goals encompass much of the Quadruple Aim

Experience of Care

Population Health

Value (Per capita cost)

Readiness

- Patient-centered, information-rich health care
- Tailoring information to needs of specific patient populations
- Patient-centered care in a value-driven health care environment
- Delivering the right treatment,
 to the right patient, at the
 right time every time



Building A Culture of Safety

- MHS engages in several AHRQ quality improvement initiatives, including:
 - Hospital Survey on Patient Safety Culture
 - Helps hospitals assess the culture of safety in their institutions
 - Patient Safety Indicators
 - Helps health system leaders identify potential adverse events occurring during hospitalization
 - Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
 - Standardized survey and data collection for measuring patient perspectives on hospital care
 - Common Formats
 - MHS participates in development of Common Formats for reporting patient safety events to Patient Safety Organizations (PSOs)



Advances in Combat Health Care



"What we've seen in the wars in Iraq and Afghanistan is a dramatic reduction in the death rate for troops wounded by roadside bombs, by sniper attacks. Troops are receiving tremendous wounds that were not survivable before."

Atul Gawande, MD AHRQ Annual Conference September 28, 2010



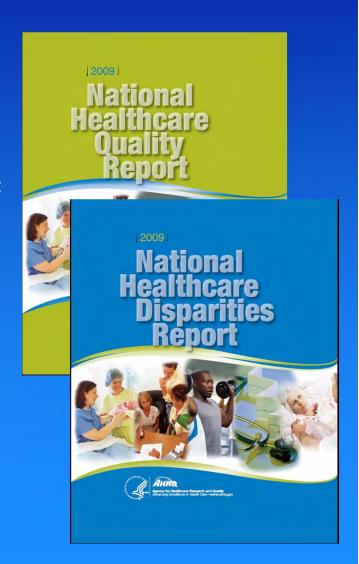
Benefits of MHS to the U.S. Health Care System

- One of the largest health systems in the nation, the Military Health System has contributed greatly to national efforts toward interoperability
- Provides an opportunity for the U.S. health care system to examine proposed solutions for expanding service to diverse populations
- Offers health service researchers a window into the challenges that the future transformed health system might face
- Constant innovation in the military system's delivery of health care is relevant at the national level



But Overall, the Pace of Improvement in the U.S. is Slow

- Quality is improving, but the pace is slow (median rate about 2% a year), especially for preventive care and chronic disease management
- Some areas merit urgent attention, including patient safety and health careassociated infections
- Many disparities are not decreasing





2009 Quality Report: Key Findings

- Median level of patients receiving needed care was 58% for core quality measures
- Among outcomes measures tracked for HAIs, only one improved (adults surgery patients with post-operative pneumonia) while 3 worsened, especially postoperative sepsis.
- Improvement is slow: a 2% median rate of change/year among 33 core measures
- Improvements spread unevenly across care settings, with hospital care improving at annual rate of 6%, compared to 1% for outpatient settings



Experience of Care: Patient Safety and Clinical Quality

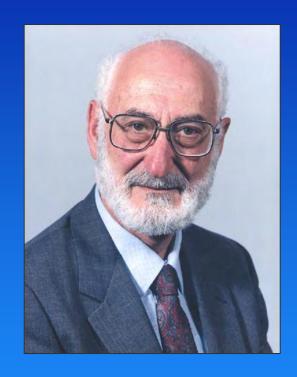


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Avedis Donabedian on Patient-Centered Care

"Our criteria and standards need to be more flexibly adaptable to the finer clinical peculiarities of each case. In particular, we need to learn how to accurately elicit the preferences of patients to arrive at truly individualized assessments of quality."





AHRQ's Effective Health Care Program (EHC)

DEcIDE Networks (13)

(Developing Evidence to Inform

Decision About Effectiveness)



Comparative Effectiveness Reviews

Reports")

EPC Reports ("Generalist

New Research Reports

Research **Tools**

CERTS (14)

Centers for Education and Research on Therapeutics

> **CERTS** Reports

Eisenberg Center

Clinical Decisions & Communications Science

Clinical Guides

Consumer Guides

Policymaker Guides

SRC **Scientific Resource** Center

AHRQ EHC Grants:

- Emphasize unbiased analysis, involvement from outside groups
- Fund research aimed at changing clinician and patient behavior



EHC Summary Guides

Policymakers



Particle Beam Radiation Therapies for Cancer

A SUMMARY FOR POLICYMAKERS

Particle beam radiation therapy (PBRT) is an alternative to other types of radiation therapies for treating cancer. This summary reviews the different types of PBRT, their potential advantages and disadvantages, and their current uses. At present, there is very limited evidence comparing the safety and effectiveness of PBRT with other types of radiation therapies for people with cancer. Therefore, it is not possible to draw conclusions about the comparative safety and effectiveness of PBRT at this time.

POLICY ISSUE

FRET has theoretical advantages that might make it asfar or more effective than other types of radiation thompy for treating certain cancers. However, FRET facilities are not available in many awas and are arpanies to build and operate. Moreover, there is limited clinical evidence that directly compares FRET with other types of radiation therapp. Policymakers must weigh several considerations when deciding whether to invest in or use FRET. This issummary outlines the theoretical pres and cone of FRET and provides a profile of the costs and current uses of this technology.

BOTTOM LINE

- Wost studies of PBRT have looked at its use in treating tumors that are inoperable or adjacent to critical body parts, such as tumors of the eye, head, neck, and spine.
- Over 60,000 people worldwide have been treated with PERT since the 1970s.
- There are at least 30 operating PBRT facilities in the world: 7 are in the United States.
- The current cost of building a PBRT facility in the United States ranges from \$20 million to \$175 million, depending on the size and scope of the facility.
- Evidence about the effectiveness and harms of PBRT compared with other cancer treatments is lacking.

SOURCE The source material for this summary is a Sachnical Brief, Perticis Bann Redistrion Therapies for Concer (2009). The Sachnical Brief was propared by the Tufts Medical Center Evidence-based Practics Center. The Agency for Healthcare Research and Unabity (AHRI) instelled the Sachnical Brief and this summary. This summary was developed using Seedback from policymakars who reviewed publishnary drafts. The Still Sechnical Brief is available as were effectivelessiblecture and region.



September 2000

Clinicians

Clinician Gui

Heart and Blood Vessel Conditions Abrial Fibrillation

Radiofrequency Ablation for Atrial Fibrillation

This guide summarizes the clinical evidence on the effectiveness and safety of catheter-based redifferences; ablation (ERA) compared with anta-traphytain-drugs (AADs) for the treatment of stratt librillation (AE). This guide does not address other aspects of AF treatment, including anticoagulation, rate control medications, or treatments other than RIA and AADs used to prosterior strate charges.

Clinical Issu

Artial fertillation (AF) is the most common sustained cardiac aritylation. Af can be participated into the har 7 days, or chaosic (more than 1 year), AF comes (more than 1 year), AF comes (more than 1 year), AF comes causes significant symptoms, each as polystations, abortines of breach, and futgue, and it associated with a friendful increased risk of death. Many people with AF care be adequated years and with more and approximately a veocided increased risk of death. Many people with AF care be adequated years death with drugs that control heart affect without restoring normal heart rhytim. However, for some people, rare control alone does not relieve the propriors. Those people may benefit from the regists to ensire normal cardiac without, Somettimes a normal relythin on the

Effective Health Care Program

maintained with medications, but anti-arrhythmic drugs (AADs) can have serious side effects.

As alternative method for restoring normal cardac chythin tradificipations platton (ERA) with ERA, a calibrate it advanced into the heart and positioned in the area of an abnormal destricted actional. On contact, the cathere to phosts the cardiac tissue using real-diregency energy. The resulting tissue destruction previews the abnormal electrical signals from being conducted. Several different abitton techniques are used for AR. When most techniques, the ablation targets are sites in the pulmonary veins and the left artium.

Clinical Bottom Line

Evidence is insufficient to determine the effectiveness of RFA as first-line therapy compared with AADs.

Among patients with AF who have failed at least one course of AADs; RFA is more effective than another trial o AADs for maintaining sinus rhythm at 1 year.

Serious complications are uncommon after RFA, but stroke and cardiac tamponade each occur in about 1 percent of cases. Level of Confidence: 8 0 0

Coa fidence Scale

The confidence ratings in this guide are derived from a systematic ratio of the literature. The layer of confidence is based on the averal quantity and quality and rating on the rational property of the pro

High www. There are cointsinct escuts from good quality studies. Further research is very untitary to change the conduction Medium www. Findings are apported, but further research could change the conclusions.

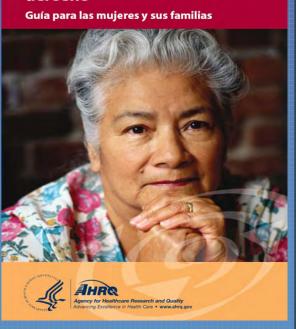
Low moo There are very few studies, or existing studies are flawed.



Consumers



Cuando se tiene una biopsia del seno

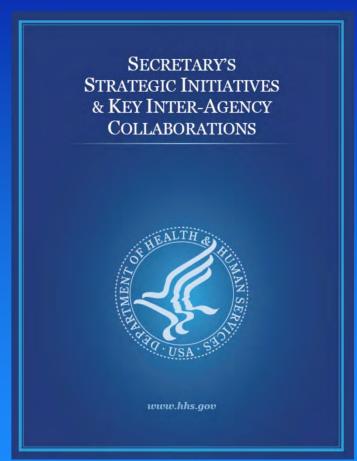


Summarize research review findings on the benefits and harms of different treatment options. Provide useful background on health conditions. Medication guides contain basic wholesale price information.



HHS Strategic Plan

- The Secretary's Nine Strategic Priorities Include:
 - Transform Health Care
 - Implement the Recovery Act
 - Accelerate the Process of Scientific Discovery to Improve Patient Care





Agenda for Health System Transformation

- Recent legislation addresses:
 - Access
 - Affordability
 - Information technology
 - Performance measurement, reporting, and improvement
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 - Equity
 - Value
- Together, these components comprise a quality agenda





American Recovery and Reinvestment Act of 2009

- AHRQ's Effective Health Care Program created by Medicare Modernization Act of 2003
- From 2005-2009, received \$129 million from Congress for CER
- Program has published more than 45 products, including guides for clinicians and consumers
- The American Recovery and Reinvestment Act contained \$1.1 billion for comparative effectiveness research, including \$300 million to AHRQ





Patient Protection and Affordable Care Act

- Health Measurement and Improvement Elements:
 - Interagency working group on quality
 - Quality measure development
 - Data, collection, analysis and public reporting
 - Standardized approaches to data on race, ethnicity, disability status, and language for all federal programs by 2010
 - Extends Medicare requirements for data collection to Medicaid and CHIP





Patient-Centered Outcomes Research Institute

- Sets priorities and coordinates with existing agencies that support patient-centered outcomes research
- Prohibits findings to be construed as mandates on practice guidelines or coverage decisions and contains patient safeguards
- Provides funding for AHRQ to disseminate research findings of the Institute and other government-funded research, and to train researchers on patient-centered outcomes research and build capacity for research



What's Next? National Health Care Quality Strategy

- Part of Affordable Care Act
- Builds on work of federal, state, local and private initiatives; identifies what works and what needs improvement
- Move from provider-level transparency to a patientfocused approach





National Strategy for Quality: Three Pillars





Experience of Care: Patient Safety and Clinical Quality



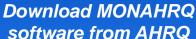
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MONAHRQ

my own network, powered by AHRQ







Load your own hospital discharge data



Select measures and website options



Generate
web pages
on your own
machine



- MONAHRQ generates a reporting website using your own hospital discharge data
- MONAHRQ calculates:
 - Quality indicators
 Utilization and costs
 - Rates by region Preventable hospitalizations
- MONAHRQ lets you control your data and your website

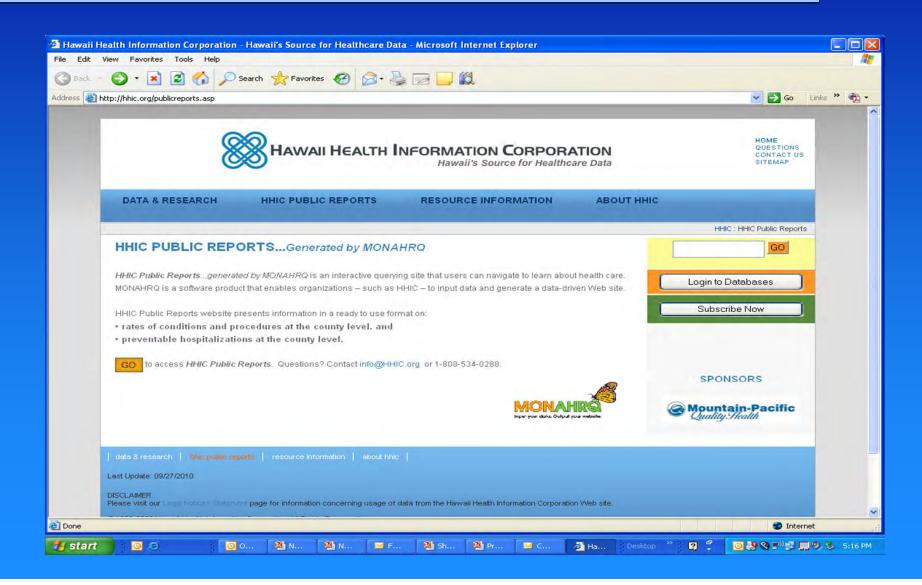


Host the website on your own server

Input your data. Output your website. monahrq.ahrq.gov



States Are Using New MONAHRQ Tool: Nevada & Hawaii Web Sites Now Live

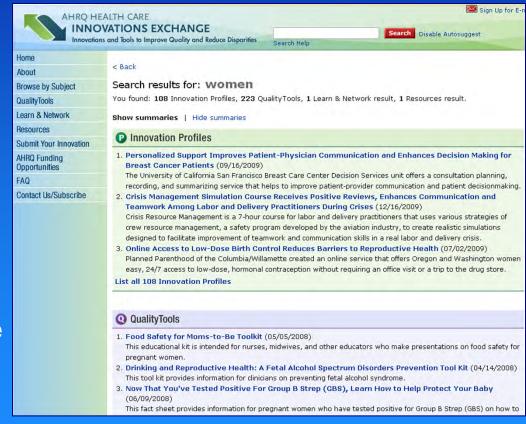




AHRQ Health Care Innovations Exchange

Web-based Repository of Cutting-Edge Service Innovations

- National electronic learning hub for sharing health care service innovations, bringing innovators and adopters together
- Searchable database featuring innovation successes and failures, expert commentaries, lessons learned, etc.,
- Designed to help health care "Agents of Change" improve quality



www.innovations.ahrq.gov



NHQR Findings: Health Care-Associated Infections (HAIs)

Process Measures	Annual rate of Improvement (%)		
Adult surgery pts. who received prophylactic antibiotics w/in 1 hr. before surgical incision	26.4		
Adult surgery pts. who had prophylactic antibiotics discontinued w/in 24 hrs. after surgery end time	32.9		
Outcome Measures			
Adult surgery pts. w/postoperative pneumonia	11.6		
Adult surgery pts. w/postoperative catheter-related UTI	-3.6		
Postoperative sepsis	-8.0		

2009 National Healthcare Quality Report



Keystone ICU Project: Low Central Line-Associated Bloodstream Infection (CLABSI) Rates Sustained

- More than 100 participating ICUs in Michigan have maintained near-zero rates beyond initial 18-month target, for an additional 18 months
- Key factors to sustainability, as noted by participating ICU teams:
 - Continued feedback of infection data
 - Improvements in safety culture as a result of the project
 - Reducing infections rates was a shared goal rather than a statewide competition
 - "An Unremitting belief in the preventability of bloodstream infections"



\$34 Million to Expand **Fight Against HAIs**



AHRQ Projects to Prevent Healthcare-Associated Infections. Fiscal Year 2010

The mission of AHRQ is to improve the quality. safety, efficiency, and effectiveness of health

- Using evidence to improve health care.
- · Improving health care outcomes through
- · Transforming research into practice.

of the top 10 leading causes of death in

the United States, According to CDC,

A core part of the mission of the Agency for Healthcare Research and CAUTI-Cathene-associated urinary tract Quality (AHRO) is to improve the CDC-Centers for Disease Commit and safety of health care for all Americans. In support of this mission. Concress CDI-Genialism difficile infection appropriated \$34 million to AHRQ for CLABSI-Central line-associated blood fiscal year 2010 for research and implementation projects to prevent and CMS—Centers for Medicare & Medicaid reduce healthcare-associated infections CUSP—Comprehensive Unit-based Safety (HAle) HAle are infections than patients acquire during the course of ESBL-EB-Extended-spectrum beta receiving treatment for other conditions lectures-producing Energlecoviews within a health care setting. AHRQ ESRD—End-rage reral discus has collaborated with the Centers for HAI-Healthcare-associated infection Disease Control and Prevention HCUP-Healthcare Cont and Utilization (CDC), the Centers for Medicare & Medicaid Services (CMS), the National ICU-Intensive care unit Institutes of Health (NIH), and the K marmonies Klabrielle means Office of Healthcare Quality in the MRSA - Methicilin-resistant Supéphone development of 22 projects aimed at addressing research gaps and NIH National Institutes of Health accelerating the adoption of evidence-PHIS Pedianic Health Information based approaches for HAI prevention. 551-Surpical site infection HAIs are the most common STPRA-Sociouchnical probabilistic ride complication of hospital care and one

ASC—Ambalatory rurgery cen-

UTI-Uningy tract infection

Goal: To help expand efforts to fight HAIs in hospitals, ESRD clinics, and ambulatory care and long-term care settings

AHRQ has collaborated with CDC, CMS, and NIH to identify research gaps to improve HAI prevention



Complete list of institutions and projects funded available at: www.ahrq.gov/qual/haify10.htm



Improving Patient Safety with TeamSTEPPS®

TeamSTEPPS®:

- Evidence-based teamwork system to improve communication and teamwork
- Ready-to-use curriculum to integrate into all areas of health system
- Rooted in more than 20 years of research
- Developed by DoD's Patient
 Safety Program in collaboration with AHRQ



www.teamstepps.ahrq.gov



Improving Patient Safety with TeamSTEPPS®

- Three phases of TeamSTEPPS
 - Assess the need: Determine an organization's readiness
 - Plan, train and implement: Options include all of tools and strategies, a phased-in approach, or individual tools at specific intervals
 - Sustainment: Sustain and spread improvements in teamwork performance, clinical processes and outcomes resulting from TeamSTEPPS initiative



National Implementation of TeamSTEPPS®

- To meet demand, AHRQ and DoD have teamed with American Institutes for Research to build a national training and support network
- Five team resource centers: Duke Medical Center (NC), Carillion Clinic (VA), U-Minnesota Fairview Hospital (MN), Creighton University Medical Center (NE), and U-Washington Medical Center (WA)
- Resource centers creating national network of master trainers, who offer TeamSTEPPS training to frontline providers



The U.S. Health Information Knowledge Base (USHIK)

Metadata Registry of Health Care Interoperability Standards

- AHRQ-funded collaboration of federal agencies including the Military Health System
- Maintains the Metadata Registry, providing a onestop-shop for easy comparisons of health data standards to support health care initiatives:
 - The Healthcare Information Technology Standards
 Panel
 - AHRQ's Center for Quality Improvement and Patient Safety (CQuIPS)
 - State All-Payers Metadata, facilitating crossmapping and harmonization efforts



Keeping the Patient at the Center





Future Directions/Questions

- How do we motivate patients to seek reliable health information and use it to make decisions?
- How do we drive the message that charting the path to high quality, affordable care is a team sport?
- How do we continue building on foundations in comparative effectiveness research, health IT, quality and safety?
- How do we make health systems easier to navigate?





Thank You



AHRQ Mission

To improve the quality, safety, efficiency, and effectiveness of health care for all Americans

AHRQ Vision

As a result of AHRQ's efforts, American health care will provide services of the highest quality, with the best possible outcomes, at the lowest cost

www.ahrq.gov